IN THE CLAIMS:

Please ADD claims 18-20.

Please AMEND the claims in accordance with the following:

1. (Currently Amended) A computer which performs parallel processing of a plurality of programs in a time-division fashion, comprising:

a memory;

an instruction fetch unit configured to fetch instructions from said memory;

hardware resources divided into a plurality of areas, the hardware resources being used in common by a plurality of programs ;

an evacuation unit ~~which~~ configured to records identification information identifying a first program, and to evacuates information stored in ~~an~~ a first area of said plurality of areas if the first area is necessary for execution of a second program and is being used for execution of the first program, said information being evacuated to a portion of said memory that corresponds to the first program; and

a restoration unit ~~which~~ configured to restore, from the memory to the first area, a first part of information necessary for execution of the second program, to mark the first area as a usable area while marking areas other than the first area as unusable areas, to restore, from the memory to a second area, a second part of the information necessary for execution of the second program if execution of the second program needs to use an area that is marked as an unusable area, and to restores the evacuated information to the first area based on the identification information when the second program comes to a halt or to an end.

2. (Currently Amended) The computer as claimed in claim 1, further comprising an interruption unit which brings about interruption processing if the first area is necessary for execution of a second program and is being used for execution of the first program, wherein said evacuation unit operates as part of the interruption processing to record the identification information and to evacuate the information stored in the first area.

3. (Currently Amended) A computer which performs parallel processing of a plurality of programs in a time-division fashion, comprising:

a memory;

an instruction fetch unit configured to fetch instructions from said memory;

hardware resources divided into a plurality of areas, the hardware resources being used in common by a plurality of programs;

an evacuation unit ~~which~~ configured to records identification information identifying a first program, and to evacuates information stored in a first area of said plurality of areas if the first area and a second area of said plurality of areas are necessary for execution of a second program and are being used for execution of the first program, said evacuation unit subsequently evacuating information stored in the second area when use of the second area becomes actually necessary for execution of the second program, said information being evacuated to a portion of said memory that corresponds to the first program; and

a restoration unit configured to restore, from the memory to the first area, a first part of information necessary for execution of the second program, to mark the first area as a usable area while marking areas other than the first area as unusable areas, to restore, from the memory to the second area, a second part of the information necessary for execution of the second program if execution of the second program needs to use an area that is marked as an unusable area, and to ~~which~~ restores the evacuated information to the first and second areas based on the identification information when the second program comes to a halt or to an end.

4. (Currently Amended) A method of controlling a computer which performs parallel processing of a plurality of programs in a time-division fashion, said computer having a memory and an instruction fetch unit configured to fetch instructions from said memory, comprising:

providing hardware resources divided into a plurality of areas, the hardware resources being used in common by a plurality of programs;

recording identification information identifying a first program, and evacuating information stored in ~~an~~ a first area of said plurality of areas if the first area is necessary for execution of a second program and is being used for execution of the first program, said information being evacuated to a portion of said memory that corresponds to the first program; and

restoring from the memory to the first area, a first part of information necessary for execution of the second program, to mark the first area as a usable area while marking areas other than the first area as unusable areas, to restore, from the memory to a second area, a second part of the information necessary for execution of the second program if execution of the second program needs to use an area that is marked as an unusable area, and to restore the evacuated information to the first area based on the identification information when the second program comes to a halt or to an end.

5. (Currently Amended) A method of controlling a computer which performs parallel processing of a plurality of programs in a time-division fashion, said computer having a memory and an instruction fetch unit configured to fetch instructions from said memory, comprising:

providing hardware resources divided into a plurality of areas, the hardware resources being used in common by a plurality of programs;

recording identification information identifying a first program, and evacuating information stored in a first area of said plurality of areas if the first area and a second area of said plurality of areas are necessary for execution of a second program and are being used for execution of the first program, followed by subsequently evacuating information stored in the second area when use of the second area becomes actually necessary for execution of the second program, said information being evacuated to a portion of said memory that corresponds to the first program; and

restoring from the memory to the first area, a first part of information necessary for execution of the second program, to mark the first area as a usable area while marking areas other than the first area as unusable areas, to restore, from the memory to the second area, a second part of the information necessary for execution of the second program if execution of the second program needs to use an area that is marked as an unusable area, and to restore the evacuated information to the first and second areas based on the identification information when the second program comes to a halt or to an end.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (New) A computer for parallel processing, comprising:

an evacuation unit configured to record identification information identifying a first program stored in a first area of a plurality of areas of a hardware resource being used in parallel by at least two of a plurality of programs, if the area is necessary for execution of a second program, and evacuates the information to a portion of a memory that corresponds to the first program; and

a restoration unit configured to restore, from the memory to the first area, a first part of information necessary for execution of the second program, to mark the first area as a usable area while marking areas other than the first area as unusable areas, to restore, from the memory to a second area, a second part of the information necessary for execution of the second program if execution of the second program needs to use an area that is marked as an unusable area, and to restore the evacuated information to the first area based on the identification information when the second program comes to a halt or to an end.

19. (New) A method for parallel processing comprising:

recording identification information identifying a first program stored in a first area of said plurality of areas being used to run at least two of a plurality of programs in parallel;

evacuating information to a memory if the first area is necessary for execution of a second program; and

restoring from the memory to the first area, a first part of information necessary for execution of the second program, to mark the first area as a usable area while marking areas other than the first area as unusable areas, to restore, from the memory to the second area, a second part of the information necessary for execution of the second program if execution of the second program needs to use an area that is marked as an unusable area, and to restore the

evacuated information to the area based on the identification information when the second program comes to a halt or to an end.

20. (New) A method, comprising:

evacuating information associated with an executing first program and identified by a first program identifier where the information is located in a first area of a processor and is evacuated to outside the processor when the area is necessary for execution of a second program; and

restoring from outside the processor to the first area, a part of information necessary for execution of the second program, to mark the first area as a usable area while marking an other area other than the first area as an unusable area, to restore, from outside the processor to a second area, a second part of the information necessary for execution of the second program if execution of the second program needs to use an area that is marked as an unusable area, and to restore the evacuated information to the first area using the identifier when the second program ends execution.